



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06



Site Name: West County Road 112 Groundwater

CERCLIS ID#: TXN000606992

Alias Site Name: NA

Address: Intersection between CR 112 & CR 1205

City/County or Parish/State/Zip: Midland/Midland County/Texas/79706

Report Type: Site Inspection

Date: March 4, 2010

Author: TCEQ - Danielle Soule

**RECOMMENDATION:**

<input type="checkbox"/> 1. No Further Remedial Action Planned Under Superfund (NFRAP)	<input checked="" type="checkbox"/> 2. Further Investigation Needed Under Superfund <table border="0"><tr><td><input type="checkbox"/> PA</td><td><input type="checkbox"/> HRS</td><td>Priority: <input type="checkbox"/> High</td></tr><tr><td><input type="checkbox"/> SI</td><td><input type="checkbox"/> RI/FS</td><td><input type="checkbox"/> Low</td></tr><tr><td><input checked="" type="checkbox"/> ESI</td><td><input type="checkbox"/> RA</td><td></td></tr><tr><td colspan="3"><input type="checkbox"/> Other: _____</td></tr><tr><td colspan="3">To be performed by: <u>TCEQ</u></td></tr></table>	<input type="checkbox"/> PA	<input type="checkbox"/> HRS	Priority: <input type="checkbox"/> High	<input type="checkbox"/> SI	<input type="checkbox"/> RI/FS	<input type="checkbox"/> Low	<input checked="" type="checkbox"/> ESI	<input type="checkbox"/> RA		<input type="checkbox"/> Other: _____			To be performed by: <u>TCEQ</u>		
<input type="checkbox"/> PA	<input type="checkbox"/> HRS	Priority: <input type="checkbox"/> High														
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<input checked="" type="checkbox"/> ESI	<input type="checkbox"/> RA															
<input type="checkbox"/> Other: _____																
To be performed by: <u>TCEQ</u>																
<input type="checkbox"/> 3. Action Deferred to: <input type="checkbox"/> RCRA <input type="checkbox"/> NRC																
<input checked="" type="checkbox"/> 4. Site Being Addressed Under the State Voluntary Cleanup Program (VCP): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																

**NOTIFY AUTHORITY:**

<input type="checkbox"/> Removal	<input type="checkbox"/> RCRA	<input type="checkbox"/> TSCA	<input type="checkbox"/> CAA	<input type="checkbox"/> SMCRA
<input type="checkbox"/> Remedial	<input type="checkbox"/> State/Tribe	<input type="checkbox"/> NPDES	<input type="checkbox"/> NRC	<input type="checkbox"/> Resource Trustee: _____
<input type="checkbox"/> CERCLA	<input type="checkbox"/> Federal	<input type="checkbox"/> UIC	<input type="checkbox"/> SPCC	<input type="checkbox"/> Other: _____
Enforcement	Facility			

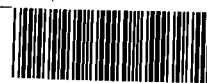
SEND SSSR COPIES TO: ☐ 6SF-AC ☐ 6WQ-SP ☐ ATSDR ☒ State Agency ☐ Tribal Agency

**DISCUSSION:**

The West County Road 112 Groundwater site is located two blocks south of Interstate Highway 20 (IH-20) near the intersection between County Road (CR) 112 and CR 1205 immediately south of the city limits of Midland, Texas. Based on the current understanding of the plume, the center of the site is at 2601 West CR 112. The site plume currently extends one-half mile from the center of the site and underlays approximately 421 acres. The land overlaying the plume is used for residential, commercial, and agricultural purposes. Sampling conducted by TCEQ at the site indicates the groundwater is contaminated with hexavalent chromium originating from unknown source(s). The site is bounded by residential properties to the south and east and by commercial properties to the north and west.

All residences and commercial businesses south of IH-20 receive water from private water wells drilled to depths between 60 and 100 feet below ground surface. The groundwater is the sole source of water in this area since the City of Midland does not have municipal water lines/connections south of IH-20. Groundwater in this area is used for drinking water and other domestic purposes. Several of the households in this area purchase drinking water, but still use the groundwater for bathing and other domestic purposes. Properties north of IH-20 receive water from the City of Midland.

Concentrations of hexavalent chromium in the groundwater exceed the EPA Maximum Contaminant Level (MCL) of 100 ug/L in several active domestic water wells. The lateral extent of hexavalent chromium exceeding the EPA MCL has not yet been delineated in the north, east, and south directions. The groundwater flow direction is from northwest to southeast. Based on current available data, the concentration of hexavalent chromium in the plume ranges from 7 to 5,200 ug/L.



There are several known remediation sites located within a four-mile radius of the site. Most of these remediation sites are addressing groundwater plumes that are contaminated with volatile organic compounds. The Dowell Midland facility is located approximately 1.5 miles north of the site and is currently monitoring a groundwater plume containing organic compounds and several metals (calcium, magnesium, sodium, potassium, and arsenic). The concentration of chromium in this plume was below the EPA MCL and TCEQ action levels. B&W is an abandoned metal fabrication and welding shop located within three-quarters of a mile northwest of the site. An investigation of the former B&W property identified a groundwater plume contaminated with chromium. This plume has been fully delineated and Lear Corporation (located at a plastics plant next to B&W) has agreed to address this groundwater plume.


In response to a complaint, TCEQ collected a sample from a domestic well at the site. The concentration of hexavalent chromium in this sample exceeded the EPA MCL. On April 13, 2009, TCEQ alerted EPA regarding the site, and EPA initiated the Preliminary Assessment through a grant with the TCEQ. On April 20 and April 29, TCEQ collected groundwater samples from additional wells in the area and discovered more hexavalent contamination. Sampling of groundwater wells continued on May 4, 2009. Based on data collected through May 2009, 37 private water wells have been identified that are impacted with hexavalent chromium above the EPA MCL. TCEQ has installed anion exchange filtration systems on 34 of the 37 private water wells. The three private wells that did not receive anion exchange filtration systems are not used for domestic purposes.

During the Site Inspection (SI) field sampling conducted from July 20 through July 23, 2009, a total of 36 groundwater samples (including background samples, equipment rinse samples, and field duplicate samples) and five soil samples (including background samples and field duplicate sample) were collected. An observed release of chromium contamination in the intermediate water bearing unit for the site was documented. No potential sources of chromium contamination were identified during the SI. Although some volatile organic compounds were detected in the groundwater samples, none of the concentrations exceeded their corresponding Maximum Contaminant Levels (MCLs) or Superfund Chemical Data Matrix (SCDM) health-based benchmarks. None of the surface soil samples collected during the SI met an observed release criteria.

Although an observed release of chromium in groundwater was documented, the source of this contamination was not identified during the SI. Based on the information provided in this SI report, it is recommended that an Expanded Site Inspection be conducted at the West County Road 112 Groundwater site in an effort to identify the source(s) of the groundwater contamination at the site. The State will be provided with a copy of this decision document.

#### APPROVALS:

Report Reviewed by: Bret Kendrick  
(Site Assessment Manager)

Signature: 

Date: 04/12/10

#### Disposition

Approved by: John Meyer  
(Section Chief 6SF-TR)

Signature: 

Date: 4/29/10